

### Abstract of the Invention

Alpha 1-antitrypsin is prepared by growing in a fermentor methylotropic yeast transformants containing in their genome at least one copy of DNA encoding alpha 1-antitrypsin, in operational linkage with DNA encoding a signal sequence, which is effective for directing secretion of proteins from the host cells, DNA constructs and recombinant yeast strains used for the expression and secretion of alpha 1-antritrypsin are also provided. The fermentation medium requires a pH of 6.5 to 7.5. The fermentation is at a pH between 5 and 6.8.